

AMENDMENT UNDER 37 C.F.R. § 1.116
Application No.: 09/867,596
Atty Docket No.: Q61608

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

Claims 1 to 6 (canceled).

Claim 7. (withdrawn): A method for producing the carbon powder as claimed in any one of claims 1 to 6, comprising adding boron carbide (B_4C) to carbon black in an amount of 0.01 to 7 % by mass in terms of boron and heat-treating the mixtures at 2,500°C or more in a non-oxidative atmosphere.

Claim 8. (withdrawn): The method for producing the carbon powder as claimed in claim 7, comprising adding boron carbide (B_4C) to carbon black in an amount of 0.5 to 7 % by mass in terms of boron.

Claim 9. (withdrawn): The method for producing the carbon powder as claimed in claim 7 or 8, wherein the carbon black is at least one kind selected from the group consisting of oil furnace black, acetylene black, thermal clack, and channel black.

Claim 10. (withdrawn): An electrically conducting carbon composite powder for supporting a catalyst, comprising carbon powder as claimed in any one of claims 21 to 26-1 to 6, having mixed therewith fibrous carbon.

Claim 11. (withdrawn): The electrically conducting carbon composite powder for supporting a catalyst as claimed in claim 10, wherein the fibrous carbon is vapor grown carbon fiber.

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Claim 12. (withdrawn): The electrically conducting carbon composite powder for supporting a catalyst as claimed in claim 11, wherein from 1 to 7 % by mass of vapor grown carbon fiber is mixed with carbon powder.

Claim 13. (withdrawn): The electrically conducting carbon composite powder for supporting a catalyst as claimed in any one of claims 10 to 12, wherein the carbon powder is heat-treated at a temperature of 2,500°C or more.

Claim 14. (withdrawn): The electrically conducting carbon composite powder for supporting a catalyst as claimed in any one of claims 11 to 13, wherein the vapor grown carbon fiber is graphitized at a temperature of 2,500°C or more and boron content in the fiber is in a range of 0.001 to 5 % by mass.

Claim 15. (withdrawn): The electrically conducting carbon composite powder for supporting a catalyst as claimed in claim 14, wherein the boron content in the vapor grown carbon fiber is in a range of 0.1 to 5 % by mass.

Claim 16. (withdrawn): A catalyst for polymer electrolyte fuel battery, primarily comprising platinum or a platinum alloy and the carbon powder as claimed in any one of claims 21 to 26 ~~1 to 6~~ for supporting the catalyst.

Claim 17. (withdrawn): A catalyst for polymer electrolyte fuel battery, primarily comprising platinum or a platinum alloy and the carbon composite powder as claimed in any one of claims 10 to 15 for supporting the catalyst.

Claim 18. (withdrawn): A polymer electrolyte fuel battery cell using the catalyst as claimed in claim 16 or 17 for anode catalyst layer and/or cathode catalyst layer.

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Claim 19. (withdrawn): A solid polymer electrode fuel battery comprising at least more than two of the stacked polymer electrolyte fuel battery cell as claimed in claim 18.

Claim 20. (withdrawn): A polymer electrolyte fuel battery using the catalyst as claimed in claim 16 or 17 for anode and/or cathode electrode.

Claim 21. (previously presented): Carbon powder having a primary particle size of 100 nm or less and an X-ray crystallite plane spacing C_0 of less than 0.680 nm, and having a boron content in a range of 0.001 to 5% by mass.

Claim 22. (previously presented): The carbon powder as claimed in claim 21, wherein the C_0 is 0.6730 nm or less.

Claim 23. (previously presented): The carbon powder as claimed in claim 21 or 22, which is carbon black.

Claim 24. (currently amended): The carbon powder as claimed in claim 21, which shows a volume resistivity of ~~$W \cdot cm$~~ $0.1 \Omega \cdot cm$ or less in the pressurized state under a pressure of 2 MPa.

Claim 25. (previously presented): The carbon powder as claimed in claim 21, wherein the boron content is in a range of 0.1 to 5% by mass.

Claim 26. (previously presented): The carbon powder as claimed in claim 21, wherein N_2 absorption specific surface area (BET) is in a range of 50 to 400 m^2/g .